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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,977	04/21/2004	Hiroshi Kanto	9683/188	5406

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EXAMINER

FOX, BRYAN J

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/828,977

Applicant(s)

KANTO ET AL.

Examiner

Bryan J. Fox

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5-13 and 19-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 5, the specification, drawings and originally filed claims fail to disclose the limitation of, "wherein said control unit is further operable to attempt to register to said first mobile communication network only when said voice communication is not presently in progress..."

Regarding claim 19, the specification, drawings and originally filed claims fail to disclose the limitation of, "transmitting from said mobile terminal to said first mobile communication network, a notification including an identifier only when voice communication is determined to not presently be in progress..."

The claims depending from these claims are also rejected for fully incorporating the deficiencies of the base claims from which they depend.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims xxx are rejected under 35 U.S.C. 103(a) as being unpatentable over Kransmo in view of Lamb et al (US006697620B1).

Regarding claim 14, Kransmo discloses a system with a mobile station that may comprise a dual mode mobile terminal, capable of being used in both 3G and 2G networks (see column 3, lines 62-67), which reads on the claimed, "first mobile communication network that includes a first location management device, wherein said first location management device is operable to manage location information of mobile terminals registered to said first mobile communication network; a second mobile communication network that includes a second location management device and a base station, said second location management device operable to manage location information of mobile terminals registered to said second mobile communication

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network.” The control channel information is provided regarding a 2G communication system within a downlink control channel of the 3G communication system to the wireless terminal (see column 5, lines 21-36) and the MS takes measurements of the carrier channels such as signal strength, and also determines if the correct cell has been selected (see column 4, lines 20-29), which reads on the claimed, “said base station positioned within said first mobile communication network, wherein said base station is operable to transmit for receipt by a mobile terminal registration possibility information indicating that it is possible to register to said first mobile communication network.” Kransmo fails to disclose a management device coupled with said first mobile communication network and said second mobile communication network, said management device operable to store location registration data correlated with a mobile terminal identifier for each of said mobile terminals, said management device operable to selectively update said location registration data in response to receipt from each of said mobile terminals of a notification of a current registration of a respective mobile terminal to at least one of said first mobile communication network or said second mobile communication network.

In a similar field of endeavor, Lamb et al disclose a universal location service register that has access to a database that stores information about subscribers to the networks serviced by the ULSR, where the information in the database enables the ULSR to provide mobility management and authentication functions for all networks that the ULSR supports. When a terminal roams, it sends a registration request to the new network, and the MSC in the new network notifies the ULSR that the mobile phone has

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requested registration. If the terminal is authorized, the ULSR updates the database to reflect that the terminal is currently registered in the new network (see column 4, line 33 – column 5, line 12), which reads on the claimed, “management device coupled with said first mobile communication network and said second mobile communication network, said management device operable to store location registration data correlated with a mobile terminal identifier for each of said mobile terminals, said management device operable to selectively update said location registration data in response to receipt from each of said mobile terminals of a notification of a current registration of a respective mobile terminal to at least one of said first mobile communication network or said second mobile communication network.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Kransmo with Lamb et al to include the above ULSR in order to eliminate the need for associating each MSC with its own HLR and AuC as suggested by Lamb et al (see column 2, lines 47-63).

Regarding claim 15, Kransmo fails to disclose said management device is operable to store said location registration data correlated with a mobile terminal identifier in a management table.

In a similar field of endeavor, Lamb et al disclose a ULSR that stores the location at which the user is currently registered (see column 4, lines 33-44), which reads on the claimed, “said management device is operable to store said location registration data correlated with a mobile terminal identifier in a management table.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Kransmo with Lamb et al to include the above ULSR in order to eliminate the need for associating each MSC with its own HLR and AuC as suggested by Lamb et al (see column 2, lines 47-63).

Regarding claim 16, Kransmo fails to disclose said management device is operable, in response to a request related to a specified mobile terminal, to specify a mobile communication network to which said specified mobile terminal is registered based on said stored location registration data correlated with a mobile terminal identifier.

In a similar field of endeavor, Lamb et al disclose when a network receives an incoming call for a user, the MSC of the home network sends a location request to the ULSR, and the ULSR responds with the routing information of the terminal in the roaming network (see column 7, lines 5-54), which reads on the claimed, "said management device is operable, in response to a request related to a specified mobile terminal, to specify a mobile communication network to which said specified mobile terminal is registered based on said stored location registration data correlated with a mobile terminal identifier."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Kransmo with Lamb et al to include the above ULSR in order to eliminate the need for associating each MSC with its own HLR and AuC as suggested by Lamb et al (see column 2, lines 47-63).

Regarding claim 17, Kransmo fails to disclose said management device is operable to receive data from said first mobile communication network when said notification is from a mobile terminal registered with said first mobile communication network, and said management device is operable to receive data from said second mobile communication network when said notification is from a mobile terminal registered with said second mobile communication network.

In a similar field of endeavor, Lamb et al disclose When a terminal roams, it sends a registration request to the new network, and the MSC in the new network notifies the ULSR that the mobile phone has requested registration, which reads on the claimed, "said management device is operable to receive data from said first mobile communication network when said notification is from a mobile terminal registered with said first mobile communication network, and said management device is operable to receive data from said second mobile communication network when said notification is from a mobile terminal registered with said second mobile communication network."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Kransmo with Lamb et al to include the above ULSR in order to eliminate the need for associating each MSC with its own HLR and AuC as suggested by Lamb et al (see column 2, lines 47-63).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kransmo in view of Lamb et al as applied to claim 14 above, and further in view of Chandler et al (US 20010012776A1).



Regarding claim 18, the combination of Kransmo and Lamb et al fails to disclose an interval of time between transmission of said registration possibility information by said base station is adjustable in accordance with a distance of said base station from a center of said first mobile communication network.

In a similar field of endeavor, Chandler et al disclose stations send an acknowledgement signal after a delay calculated on the basis of the distance from the destination station (see paragraph 18).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kransmo and Lamb et al to include the above delay in order to avoid collisions as suggested by Chandler et al (see paragraph 18).

### ***Response to Arguments***

Applicant's arguments with respect to claims 5-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox  
May 30, 2006

  
**CHARLES APPIAH**  
**PRIMARY EXAMINER**